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PATENT SPECIFICATION

359,362



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COMPLETE SPECIFICATION.

Improvements in Sanitary Napkins.

We, JOHNSON & JOHNSON (Gr. BRITAIN) LIMITED, of Slough, Buckinghamshire, a Company organised under the laws of Great Britain, do hereby declare the nature of this invention (which has been communicated to us by Johnson & Johnson, a Corporation organised under the laws of New Jersey, of New Brunswick, New Jersey, United States of America) and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

Objects of the invention are to promote the hygiene and comfort characteristics or qualities of sanitary napkins and to effect economy and expedition in the manufacture and assembly of the components thereof.

The invention is particularly addressed to that type of napkin embodying a pad, constituted of a fluffy mass of absorbent, down-like fibrous material, a light textured vest or form loosely enveloping the pad so as not to interfere with the expansive and conformable properties thereof, and the usual gauze casing or envelope. In this type of napkin the practice is to process or treat the back of the vest so as to make it impervious to fluids. That practice requires the use of special machinery and the exercise of special precautions to limit the area of the fluid-repellent material, and it also makes for undesirable stiffness in the vest which desirably should be free from stiffness. It is a merit of the invention in one aspect that it departs from that practice thereby obviating the disadvantageous feature mentioned and ultimately resulting in certain economies.

According to the invention the light-textured vest is open longitudinally and the opening is covered by a sheath or sheath of impervious material which extends underneath the longitudinal edges of the vest.

The nature of the invention will be more readily understood from the following description taken in connection with the accompanying drawings which show an embodiment of the invention.

Figure 1 is a perspective view of a
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sanitary napkin with parts opened up to show the relative arrangement thereof.

Figure 2 is a sectional view of the pad with the sheath and vest in position.

Figure 3 is a face view of the sheath.

According to the invention, and under the preferred practice, there is employed a pad 5 constituted of cellulosic material such as alpha pulp in a fluffy down-like state. This material is distinguished for its marked capacity for absorbing fluids and for the live nature of its fibre which enables it to expand when released from compression so that as a unit, it has pronounced conformability and makes for maximum comfort. Owing to the fugitive character of the fluffy material of the pad, a so-called vest 6 is employed for the double office of acting as a form for the pad material and for providing at the back thereof fluid-repellent means. Vest 6 is constituted ordinarily of textured, readily conformable material such as cobwebby paper e.g. very thin sheets of cellulose wadding, folded loosely about the pad material and free from longitudinal joints so as to permit free expansive play of the pad material. The usual practice is to treat or process the back of the vest in such way as to make it more or less impervious to fluids, and this process or treatment usually entails the use of waxes or the like which, without regard to their nature or the mode of their application, impart undesirable stiffness to the vest and greatly detract from its soft, conformable and pad adapting qualities. Moreover, the processing or treatment of the vest requires the use of special machinery and the exercise of special precautions in order to localize the application of the fluid-repellent material and so restrict its area that it will not trespass upon surfaces or areas that should not be treated.

It is a merit of the invention that while retaining all of the advantages of the assembly of the fluffy and expansive pad and the conformable vest, it departs from a well-known practice with respect to the carriage of the fluid-repellent material. In a word, it retains all of the desirable features of the vest and eliminates the

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undesirable features. This is accomplished by using a sheath 7 treated in any approved way to make it impervious to fluids. Sheath 7 may be light textured, cobwebby material e.g. very thin sheets of cellulose wadding blanked from stock material to fit the face contour of the pad and held to place by the wings 8 of the vest, the assembly being completed by the usual gauze wrapper 9.

- 10 It will be obvious to those familiar with the napkin problem that the provision of sheath 7 as an element separate and apart from the pad and from the vest not only makes for the promotion of comfort and conformability, but also results in a great saving in time, labour and material with respect to the processing or treatment for fluid-repellent purposes, and also makes for simplicity and expediency in the assembly of the napkin.

- 20 Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

- 25 1. A sanitary napkin embodying a pad of absorbent material, a sheet of cobwebby material enfolding the pad in such way as to provide a vest open at the end and open longitudinally so as to permit full expansive play of the pad, and a

sheet of impervious material underlying the free longitudinal edges of the vest.

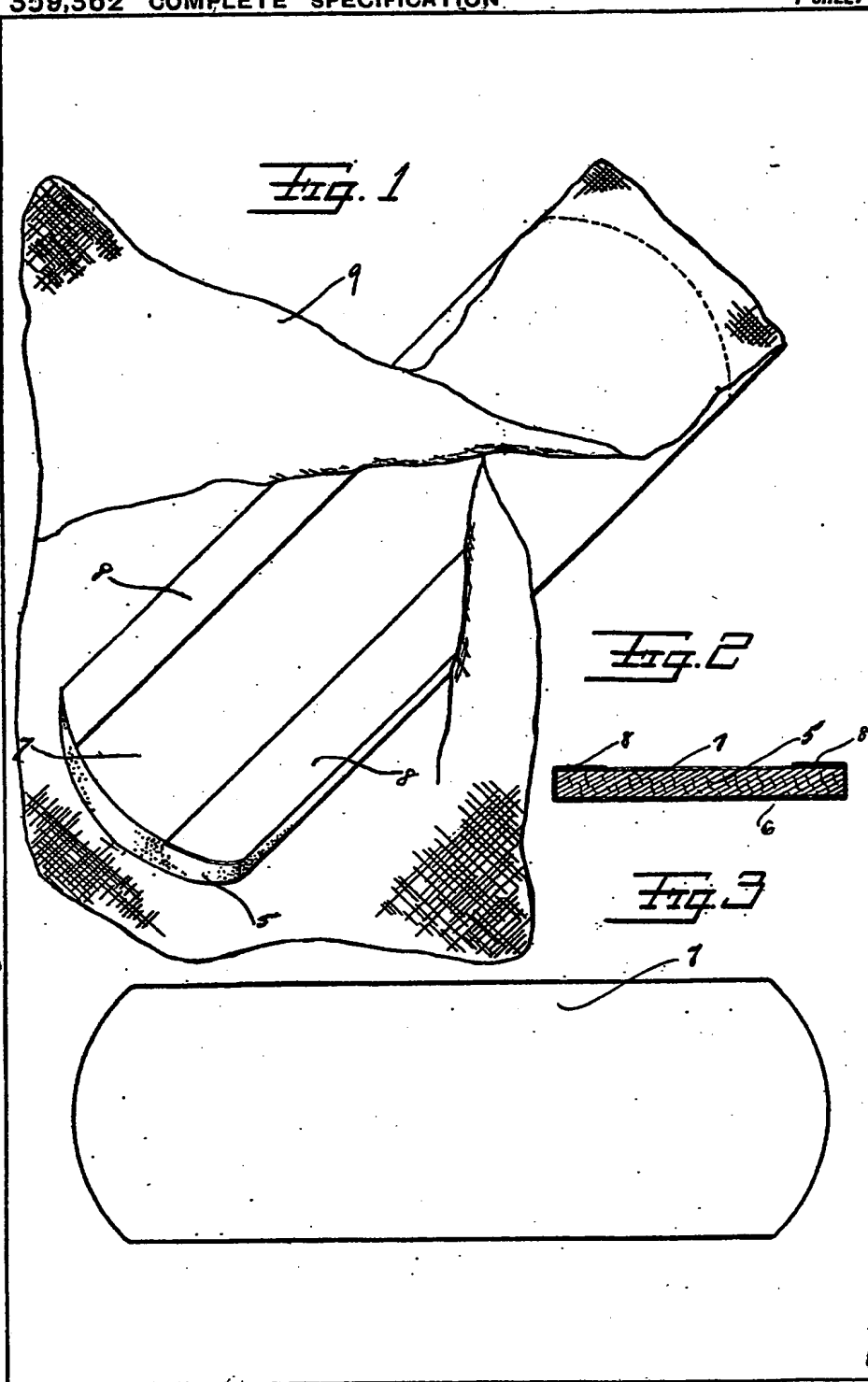
2. A sanitary napkin embodying a pad of cellulosic material in a state of down and having marked expansive capacity a sheet of cobwebby material for example very thin sheets of cellulose wadding to prevent fugitive action of the down-like material without interfering with the expansive play thereof, and an impervious sheath applied as a separate element across a longitudinal opening of the sheet and restrained by the opposed margins of the sheet.

3. A sanitary napkin embodying a pad of fluffy absorbent material, a light textured form of pervious material terminating in opposed wings on one side of the pad, and a sheet of light textured material processed to make it impervious to fluids and contoured to fit the face of the pad and held to place by said wings, and a gauze wrapper.

4. Sanitary napkins substantially as described and as illustrated in the accompanying drawings.

Dated the 16th day of March, 1931.
CARPMAELS & RANSFORD,
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[This Drawing is a reproduction of the Original on a reduced scale.]



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